

Patent Claims:

1. A method for loading and unloading long-distance transportation means (1, 2) and for temporarily storing a standardized cargo (18), e.g. containers, interchangeable body structures for highway trucks, in an intermediate storage facility, with the cargo (18) being identified, in particular automatically, and lifted by a rail-guided hoist (5) with gripper (8) from a long-distance transportation means (1) and transferred to a transfer zone (4), lowered and deposited, subsequently transferring the cargo automatically on rails to an at least single-level, especially multilevel intermediate storage facility (3), e.g. high-rise rack, for automatic storage there, subsequently automatically withdrawing and transporting the cargo on rails to a predetermined location in the transfer zone (4) for lowering and placement with the rail-guided hoist (5) onto a rail-guided long-distance transportation means (2), **characterized in** that the cargo (18) is lifted in the transfer zone (4) by a further rail-guided hoist (11) with, especially same, grippers as the hoist (5), e.g. spreaders, combination spreaders, tongs, and automatically moved, optionally approximately horizontally, to the predetermined location in the intermediate storage facility (3), optionally under vertical conveyance, through intervention of a shiftable and/or telescopic arm (13) of the further hoist (11) into the intermediate storage facility (3) and lowered and deposited there, whereupon the rail-guided long-distance transportation means (2) is loaded by automatically moving the further hoist (11) to a predetermined location of the intermediate storage facility, and lifting the cargo (18) via the shiftable and/or telescopic arm (13) and automatically withdrawing the cargo from the intermediate storage facility (3) and automatically moving the cargo to a predetermined location in the transfer zone (4), and lowering and depositing the cargo (18) in the latter, whereupon the cargo (18) is lifted by the hoist (5) and moved above

the long-distance transportation means (2), and lowered and deposited there.

5 2. Method according to claim 1, **characterized in** that the cargo (18) on the hoist (5) and/or the further hoist (11) is pivoted about at least one approximately vertical axis.

10 3. Method according to claim 1 or 2, **characterized in** that the cargo (18) on the hoist (5) and/or the further hoist (11) is pivoted about at least one approximately horizontal axis.

15 4. Method according to claim 1, 2 or 3, **characterized in** that the cargo (18) is moved directly from a long-distance transportation means (1) via rails (10) of the rail-guided long-distance transportation means (2) to the transfer zone (4) and lowered there.

20 5. Method according to one of the claims 1 to 4, **characterized in** that the further hoist (11) is moved substantially along, especially parallel to, the intermediate storage facility (3) and the rail-guided long-distance transportation means (2).

25 6. Method according to one of the claims 1 to 5, **characterized in** that the cargo (18) is removed from the intermediate storage facility (3) and pre-positioned in the transfer zone (4) in accordance with the desired disposition upon the rail-guided long-distance transportation means (2).

30 7. Method according to one of the claims 1 to 6, **characterized in** that the cargo (18) on the further hoist (11) is moved with its center of gravity above a single rail mounted to the ground or above several ground rails in midsection thereof.

8. Method according to one of the claims 1 to 7, **characterized in** that the movement of the cargo (18) on the further hoist (11) and the movement of the further hoist itself are inhibited when the hoist (5) is in neighboring disposition.
9. Method according to one of the claims 1 to 8, **characterized in** that the movement of the further hoist (11) is controlled by position transmitters in front of and/or in the intermediate storage facility (3).
10. Method according to one of the claims 1 to 9, **characterized in** that position transmitters are provided on the hoist and/or further hoist for controlling the movement thereof.